

Claims:

1. Method for controlling the width of the spray jet of an atomizer used in the series coating of workpieces, wherein the atomizing cone of the coating material being sprayed is bounded by a controllable gas current that annularly surrounds the atomizing cone and emerges from the atomizer concentric to the atomizing cone axis (3), characterized by the fact that at least two gas currents which can be controlled independently of one another are produced, wherein said gas currents are utilized as a function of the workpiece regions to be coated, and emerge at different radial distances from the atomizing cone axis (3).

2. Method according to Claim 1, characterized by the fact that each gas current is controlled by a separate control circuit.

3. Method according to Claim 1, characterized by the fact that a controlled gas current is supplied to the radially outer or the radially inner outlet openings (12,13), depending on the workpiece regions to be coated, by means of a controlled reversing valve.

4. Method according to one of the preceding claims, characterized by the fact that only one gas current is used for coating processes carried out with a wider atomizing cone, and by the fact that only the other gas current is used for coating processes carried out with a narrower atomizing cone.

5. Method according to Claim 4, characterized by the fact that the two adjusting ranges of the width of the atomizing cone overlap one another.

6. Atomizer for the series coating of workpieces, with at least two annular arrangements of outlet openings (12,13) that concentrically surround the atomizing cone axis (3) at different radial distances, wherein said outlet openings face the atomizing cone and serve to produce a gas current that bounds the atomizing cone, and with a gas line arrangement that leads to the outlet openings (12,13) and is or can be connected to at least one control circuit for the gas current, characterized by the fact that the radially inner gas current and the radially outer gas current can be controlled independently of one another.

7. Atomizer according to Claim 6, characterized by the fact that the radially inner arrangement of outlet openings (13) and the radially outer arrangement of outlet openings (12) are or can be respectively connected to a separate control circuit.

8. Atomizer according to Claim 6, characterized by the fact that the supply line arrangement leading to the arrangements of outlet openings (12,13) is or can be connected to a common control circuit by means of a reversing valve.

9. Atomizer according to Claim 8, characterized by the fact that the reversing valve is situated in the atomizer.

10. Atomizer according to one of Claims 6-8, characterized by the fact that each arrangement of outlet openings (12,13) is connected to one gas connection of the atomizer for one respective external gas supply line.

11. Atomizer according to one of Claims 6-10, characterized by the fact that the two arrangements of outlet openings (12,13) are situated in the end face (5) of an annular body (4) that faces the atomizing cone, wherein said annular body is mounted on the end face of the housing (2) that serves to hold the spraying head (1) of the atomizer and faces the atomizing cone.

12. Atomizer according to Claim 11, characterized by the fact that the peripheral surface (7) of the annular body (4) is aligned flush with the adjacent peripheral surface (8) of the housing (2).